

What is claimed is:

1. A manifold assembly comprising:
  - a collar;
  - a base;
  - a first sample processing device;
  - a second device stacked below said first sample processing device to form an integral stacked unit preventing relative movement between said first and second devices, said stacked unit positioned between said collar and said base;
  - a first seal between said collar and said base;and
  - a second seal between said first sample processing device and said collar.
2. The manifold assembly of claim 1, wherein said first sample preparation device is a multiwell filtration plate.
3. The manifold assembly of claim 2, wherein said second device is a collection plate.
4. The manifold assembly of claim 2, wherein said second device is a MALDI target.
5. The manifold of claim 1, wherein said second device is a removable support.
6. The manifold assembly of claim 1, wherein said first seal is a gasket.
7. The manifold assembly of claim 1, wherein said second seal is a gasket.

8. The manifold assembly of claim 1, wherein said first seal allows for variability in the height of said first and second devices.
9. The manifold assembly of claim 1, wherein said collar has substantially vertical side walls, and wherein said first seal is created with a gasket positioned within said base, said sealing being along the substantially vertical side walls of said collar.
10. The manifold assembly of claim 1, wherein said first and second seal are a unitary seal.
11. The manifold assembly of claim 1, further comprising a vacuum source, and wherein said base comprises a port for communication with said vacuum source.
12. The manifold assembly of claim 1, wherein the relative movement of said first and second devices of said integral stack unit is unaffected by the application of vacuum to said manifold.
13. A manifold assembly comprising:
  - a collar;
  - a base in sealing engagement with said collar;and
  - a sample processing device positioned in sealing engagement with said collar.
14. The manifold assembly of claim 13, further comprising a removable support positioned below said sample processing device.

15. The manifold assembly of claim 13, wherein said sample processing device is a multiwell filtration plate.

16. A method of applying vacuum to a manifold assembly, comprising:

providing a vacuum source;

providing a manifold comprising a base having a port for communication with said vacuum source, a collar, a first sample processing device and a second device stacked to form a sample processing unit;

positioning said sample processing unit between said base and said collar;

positioning said collar on said base; and

applying a vacuum to said manifold with said vacuum source, whereby said collar is forced into sealing engagement with said base without causing movement of said sample processing unit.

17. The method of claim 16, wherein said first processing device is a filtration plate.

18. The method of claim 16, wherein said sealing engagement between said collar and said base is adaptable to different sample processing unit stack heights.

19. The method of claim 16, wherein functional inserts are positionable in said base.

20. The method of claim 16, wherein said second device is a sample processing device.

21. The method of claim 16, wherein said second device is a removable support.
22. The method of claim 15, wherein said second device is a MALDI target.